MARCH 2013

PARTICLE POST

ISSUE

COLLIDER-ACCELERATOR DEPARTMENT

PREVIOUS ISSUES

Quote of the Month:"No amount of experimentation can ever prove me right; a single experiment can prove me

December 2012

{HOME PAGE}

BNL WEBSITE | C-AD WEBSITE | ES&F WEBSITE | BERA | BNL CLASSIFIED ADS | INSIDE RHIC

A WORD FROM THE:

Administration

Accelerator Div.

ES&F Div.

Acc. R&D Div.

Operations

Contact: C. Scholl

➤ Arrivals/Departures



wrong."- Albert Einstein

NOTE FROM OUR CHAIR: Thomas Roser

This year's RHIC run is off to a good start: the cool-down proceeded with record speed, beam polarization and intensity in the ACS are at last year's level and we have already collisions for the experiments overnight. The RHIC lattice was changed to accommodate the new electron lenses in IR 10 that will be used to compensate the beam-beam force at the proton-proton collisions at IR 6 and IR 8 and should allow us to increase the luminosity. This year we will perform an engineering test of one of the lenses.

The budget situation remains uncertain. By the time you read this a sequestration of the federal budget has likely started, which means that an across-the-board cut of about 5% is in effect. The impact of this cut is quite severe generally but we will likely be able to continue the RHIC run and we don't anticipate any impact on our staffing levels at this point, mainly because we prepared for this situation by maintaining a hiring freeze and delaying the start of any new Accelerator Improvement Projects.

GET TO KNOW YOUR COWORKER! This Month: Caitlin Scholl

CONFERENCE PROJECTIONS DUE: March 12th

DID YOU KNOW??

PH.D. Students! Don't forget to submit your thesis for the <u>RHIC & AGS Thesis Award</u>, applications due March 29th, 2013. IF YOU HAVE NOT REGISTERED PLEASE <u>REGISTER HERE</u>.

Stony Brook University Village Center is Sponsoring Navigate Your Health Care presents "Stem Cells" with Dr. Moll, SBU, on March 21. Discussing Stem Cell Research - What is it all about?

EVENTS/SEMINARS...



Check out the <u>BNL Calendar</u> for upcoming events & Seminars or the <u>Upcoming Conferences & Workshops</u> page for workshops and Conferences happening at BNL.

March 13 ~ (8:30pm~12pm/SNYDER) MATLAB Breakfast Seminar, to register click here.

March 18 - (3:30pm-4:30pm/LCR) Seminar "Construction and Commissioning Plan of Compact ERL Injector in KEK," Dr. Tsukasa Miyajima, KEK.

There are new entry & exit procedures to access the AGS Tunnel? Review the slides and handouts.

BNL Revitalized The Service Anniversary Program? In February the lab updated it's longstanding tradition of recognizing employees who reach milestone anniversaries and rewarding them for years of service and dedication. Read More.



WINTER STORM NEMO brought in snowfall just shy of 3ft in some areas of Long Island! Check out some of the pictures taken of the Laboratory after the storm passed, thanks to Theresa Rapkiewicz.

March 19 - (8am-6pm/SBU) "Research Your Future, <u>Career & Networking Symposium</u>" P. Roy Vagelos M.D.

March 20 - (4pm/BERKNER) Brookhaven Lecture "485th Brookhaven Lecture: "The Plasma Window" Ady Hershcovitch

IN OTHER NEWS...

A Cyclotron's Long Journey Home \sim One of the World's <u>1st working Accelerators</u> returns to Berkeley Lab - 75 Years Later!

China Joined the Hunt for Dark-matter ~ China launched the world's deepest particlephysics experiment. Read more about the laboratory, it's competitors and the cost of these deep-matter experiments in the Article: <u>Dark-matter hunt gets deep</u>

Stanford researchers develop tool for reading the minds of mice ~ Read about how this tool will useful when studying new therapies for neurodegenerative diseases.

<u>2013 Police Interceptor</u> - Take a look at Ford's new law enforcement car and SUV designed to handle the rigors of police work. See what's coming to Long Island.

Check out MSN's ~ Weird & wacky vehicles of the new millennium.

WHAT'S GOING ON IN OUR NEIGHBORHOOD?

Interested in Cycling? Why don't join in on the <u>Saratoga 200km Brevet</u> Event happening up in Schuylerville, NY?? Also for upcoming events in May there is the the <u>Bike Expo, TD Five Boro Bike Tour</u> in NYC and the <u>Ride to Montauk</u> starting in Babylon! Do you like Racing? If you do you should check out the <u>Grant's Tomb</u> Criterium!

Interested in Running or Walking? Check out the <u>lirunning March Calendar</u> for the following events: Merrell Caumsett 25K & 50K, Jonas Chiropractic 4 Mi & 5 mi, Spartan 5K Run, Go for the Green 5k, Kings Park 15K, Conquer the Hills 5K and the Suffolk County Half Marathon & 5K! There is also the Rockaway <u>NY Running Series</u> and Brooklyn Marathon in Oct. <u>The Survival Race</u> is May 4th Register now!

Check out the Bands coming to LI!

The Paramount in Huntington: The Saw Doctors, Booker T., Matchbox 20, Black 47, Jewel, The Marshall Tuckerband, Deftones and more..

The Emporium: Zoso: The Ultimate Led Zeppelin Experience, Big Shot, Tha 70's Band, Who's bad: The Ultimate Micheal Jackson Tribute Band, Norma Jean (April) & Badfish: A Sublime Tribute (April) and more..

Patchogue Theatre of Performing Arts: Rosanne Cash, Robben Ford, Patsy Cline Tribute Band, Mick Hargreaves & Russ Seeger, The Kingston Trio, The New Musicals Project (April), Soundswell (April), Patchogue Jam 6 (April) and more..

Boulton Center of Performing Arts: Joan Osborn, Acoustic Alchemy, Jack's Waterfall Blues Fest & Drum Circle and more...

The Nassau Coliseum: Pink, Muse (April)

Westhampton Beach Performing Arts: Cowboy Junkies, The Celtic Tenors, Toots & theStylistics, & More..

How about some Comedy? Demetri Martin (NYCB Theatre at Westbury); Dana

DAY AT THE VINEYARDS...

Macari Vineyard - [MATTITUCK] March 3 (2:30pm) Mundoclave | Jazz & March 9 (3pm) Michael Jazz Trio; March 16 (3pm) Brushtrokes on Bergen with the step-by-step instruction of Kate Berry; (APRIL) 13 Olga Elkind Art Show

Duckwalk North - [SOUTHOLD] March 17 (2:30-4:30PM) Amanda Ruzza Group | Jazz & March 23 (1-5PM) Mike Munzer

Duckwalk South ~ [WATER MILL] No Events Posted

Castello di Borghese Vineyard & Winery - [CUTCHOGUE] ** Vineyard Tours & Wine Tastings Every Saturday @1pm & FREE Jazz Every Saturday (2-4) with Marguerite Volonts** March 2 (4:30-6:30) Jazz with Doug Munro & La Pompe Attack; March 9 (4-6pm) Jazz with George Cables Trio; March

Jamesport Vineyards - March 2 (3pm) Bob Leto Trio; March 9 (4:30) Laura Kahle Trio; March 17 (2:30) Montana Skies

Martha Clara Vineyards - [RIVERHEAD] March 1 (7:30pm) Comedy Festival; March 2 -FREE- (2-5pm) Music with East End Trio; March 2 (6pm) Claes Brandal & The Latin Jazz Odyssey; March 3 (1 & 2:30pm) Wine 101 & (1-4pm) FREE Music with Sly Geralds Band; March 9 -FREE- (2-5pm) Music with Moving Violations; March 10 (1 & 2:30pm) Wine & Artisanal Olive oil Pairing & (1-4) FREE Music with Keith Maguire; March 16 FREE- Live Music with Bangers & Mash; March 17 -FREE- (1-4) Music with The Sea Monkeys; March 22 (7pm) Winter Concert Tribute: Fleetwood Macked, March 23 (1 & 2:30) Wine & Artisanal Cheese Pairing & (1-4pm) FREE Music with Hart & Soul; March 30 -FREE- (2-5pm) Music with Pearl Street Band; **APRIL** 6 -FREE- (2-5pm) Music with Sly Geralds; APRIL 7 -FREE- (1-4pm) Music with The In Crowd...

Palmer Vineyards - [RIVERHEAD] March 2 (3pm) The Amy Cervini Trio | Jazz; March 23 (11am) Vineyard Dog Walk

Carvey, Former SNL Stars (The Paramount, Huntington); Big Laughs in Bayshore (Boulton Center), Boing Boing (Play) at John W. Engeman Theater in Northport.

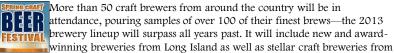


• Hofstra University 15th Annual Irish Festival! The Irish Festival Celebrates The Irish Gifts Of Music, Food And Culture To America. Sunday, March 10, 2013 From 11 A.m. To 5 P.M., At The Physical Education Center..(Click Here for more info)

St. Patrick's Day Celebration! At Old Bethpage Village Restoration (March 9), At Cold Spring Harbor Whaling Museum (March 17)

For the Kids: Ringling Bros. & Barnum & Bailey; Mickey's Music Festival (April) @ The Nassau Coliseum. The Adventures of Peter Rabbit at Theatre Three in Port Jefferson. Thar She Blows! Annual Family Event at the Cold Spring Harbor Whaling Museum. Aladdin at the Bayway Arts Center in East Islip. Dinosaur Daze & Dinosaur <u>Detectives</u> at the Educational & Cultural Center in Stony Brook. The Great Egg Hunt at Sands Point Preserve (March 24). Ir. Marine Biologists Camp!

Coming to Nassau Coliseum the Spring Craft Beer Festival !



across the country. The 60,000 sq. ft. exhibit hall will once again include a beer garden with a great menu of craft beer infused faire, giveaways from beer garden sponsor, and a relaxing place for friends to meet and relax.

Long Island Spring Home Show! Whether you've been in your home for years or just moved in, the Home Show is the one stop shop for all your home improvement needs!



Pindar Vineyards - [PECONIC] *Live Music (1~5pm)* March 2: Ken Sambolin; March 9: Mark Eisemann & (1~3pm) Barrel Tastings; March 16: Bob Carney *St. Patrick's Day Basket Giveaway*; March 23: Tommy Sullivan & (1-3pm) Barrel Tastings; March 30: Ken Sambolin

Baiting Hollow Farm Vineyard - [CALVERTON] *Music every Sat & Sun from (2-6pm)* March 24: Denice Given and Conrad Taylor; March 30: Southbound; March 31: Old School; (April) 6: Ricky Roche; (April) 7: Top Cat; (April) 13: Southbound; (April) 14: Old School; (April) 20: Ricky Roche; (April) 21: Southbound; (April) 27: Tommy Keys; (April) 28: Denice Given and Frank Filipo

Paumanok Vineyards ~ [AQUEBOGUE] *Music every Saturday until ~ March 16* (2~ 5pm) by the SERENADE DUO: Michelle LaPorte on flute and Gerry Saulter on guitar. (They have played in London and Paris)

Montauk Manor Murder Mystery Weekend!!

OUR POC ANNA PETWAY IS ASKING FOR ALL JULY'13 PROJECTIONS BE SENT TO HER BY MARCH 12 - BELOW ARE THE FOLLOWING CONFERENCES THAT WERE ALREADY SENT.

IF YOU PLAN ON ATTENDING A CONFERENCE AND IT IS NOT LISTED BELOW OR YOUR NAME IN NOT UNDER THE NAMES OF ATTENDEES AND YOU PLAN ON ATTENDING PLEASE CONTACT A. PETWAY (petway@bnl.gov), OUR POINT OF CONTACT (POC) WITH THIS INFO IMMEDIATELY.

JULY 2013 - Collider-Accelerator Department - Projections *DUE MARCH 12 2013*

Proposed Conferences for which the Department of Energy (DOE) is a Sponsor or Participant

Conference Start Date (mm/dd/yy)	Conference End Date (mm/dd/γγ)	Title of Conference	Location	Venue	Names of Attendees
7/9/2013	7/12/2013	(WIPR 2013) - 2nd International Workshop on Innovative Personalized Radioimmunotherapy	Nantes, France	New Pharmacy Faculty of Nantes France	L.Mausner, S.Srivastava
7/14/2013	7/19/2013	MT23 - International Conference on Magnet Technology	Boston, MA	The Westin Copley Place Boston	J.Muratore
7/22/2013	7/25/2013	1st. Annual International Conference on Physics & Chemistry	Athens, Greece	venue is determined 1-2 weeks before the conference	N.Tsoupas
7/22/2013	7/26/2013	29th Annual Coordinate Metrology Society Conference	San Diego, CA	Sheraton San Diego Hotel and Marina	M. ilardo

IF YOU ARE NOT ON THESE PROJECTIONS YOU WILL NOT BE APPROVED FOR TRAVEL TO ANY CONFERENCE IN JULY.

NOTE FROM OUR ADMINISTRATION: Stephanie LaMontagne-McKeon

looming threat of sequestration (automatic Federal spending cuts). As this article goes to press, our fiscal year 2013 budget remains unknown, and the DOE guidance provided for planning purposes may or may not bear any resemblance to the eventual outcome of the Congressional budget process. Needless to say, the lack of a firm budget places considerable challenges upon us as we operate RHIC and go about meeting our scientific goals.

So how have we managed to operate this year when our budgets are unknown? The key is in planning

The complicated Federal budget process has garnered a great deal of press attention recently due to the

and focusing on what we do know. We know that the preliminary budget guidance provided by DOE's Office of Nuclear Physics is sufficient to support C-AD staff along with 15 weeks of cryo operations. We also know that possible funding reductions modeled in recently requested "what if" scenarios demonstrate that both staff and cryo operations of up to 5 to 15 weeks can be supported without a reduction in force. With that knowledge, we go about the day- to-day business of operating RHIC in a safe and fiscally conservative manner.

rith sequestration, one thing is certain—that the unknowns of our Federal budget will continue for at least the next few weeks (at a finitive news from the DOE's Office of Science, please be reminded that continued constraint now will ensure greater flexibility in ductions in the second half of the year. Once again, remember to "Use It Up, Wear It Out, Make It Do or Do Without."

NOTE FROM OUR ACCELERATOR DIVISION: Wolfram Fischer

The RHIC Run-13 is under way. We are commissioning a new lattice with 4 additional phase shifter power supplies, which will be needed later for the electron lenses. While the new lattice was only intended for stores, Vahid Ranjbar, the Run Coordinator, found that this lattice also has beneficial properties for the spin transmission of the energy ramp, and we are extending it to the ramp. The new polarized source is being used, and now performs as well or better than the old source. We can expect even more from the new source in the future. We expect to be in physics operation soon.

Meanwhile BLIP operation continues with high reliability, and the next NSRL is scheduled to start on 18

Searchable Technical Notes

March.

A small team including Mary Peterson, Stacey Kuczewski, and Michiko Tanaka from the Library, Dave Biersach from ITD, Mike Blaskiewicz, Doreen Cantelmo and Anna Petway from C-AD have worked on a

searchable library system for our Technical Notes. With this we would like to make it easier to access the information that has been accumulated over the years. There is much information about our machines in these notes.

The first series available in searchable form are the C-AD AP Notes from 1999 to present (http://public.bnl.gov/docs/cad/Pages/Home.aspx), and we will move other series into this database. The catalog of all Technical Notes is http://www.rhichome.bnl.gov/AGS/InternalReports.html, and it is linked from both the Department and Accelerator Division home pages.

NOTE FROM OUR EXPERIMENTAL SUPPORT & FACILITIES DIVISION: Phil Pile

Post for the past 8 years (close to 100 editions). Thanks Pam! Caitlin has agreed to take on this responsibility starting with this edition, so thanks to her for that!

Run 13 setup is on schedule and progressing well. If all goes according to the present plan we should be in the "Physics" mode by Friday, 8 March. We are still planning on a 15-20 week run but still do not have a final budget and threat of sequestration looms. Our plan, however, remains unchanged -- to focus on 255 x 255 GeV polarized protons with an option for a low energy gold-gold run at the end.

Both the STAR and PHENIX experiments are ready with all systems up. Both experiments have seen collisions and have completed some initial timing setups. The machine should be is the initial "ramp-up" mode tonight with overnight stores for experiments to use for setup.

First things first. I'd like to express my appreciation to Pam for her excellent job as editor of the Particle

NSRL Run13A for NASA is scheduled to start on 18 March and continue through 10 May. Run 13A will be followed after a short break by Run 13B.

BLIP has been running since 17 December and will continue through June and possible into July.

NOTE FROM ACCELERATOR R&D DIVISION: Ilan Ben-Zvi

CeC PoP: the 112 MHz SRF gun cryomodule was successfully tested at Niowave in February. We were able to condition multipacting barriers in the cavity and reached accelerating voltage of 0.82 MV in CW mode and about 1 MV in pulsed mode. The field limited by insufficient radiation shielding at the Niowave test facility. We will be able to condition it further when the gun is delivered to BNL.

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LARP: A prototype double quarter wave crab cavity was chemically polished at Niowave and is at BNL to be baked in our vacuum oven at 600C. After that it will be shipped to Niowave for final chemical etch and particulate-free cleaning. The first vertical test of this cavity will be at the Small VTF in building 912.

NOTE FROM OPERATIONS: Paul Sampson

Shutdown 12 officially ended with the startup of RHIC Run13 in February. Though many challenges were posed by the aggressive schedule and ambitious undertakings completed this year, startup is progressing quite well and on schedule. At RHIC, final preparation for the run was completed early February and cool down to 4k started on the 11th. Once cold, a balance of beam work and power supply commissioning/setup ensued. The setup for Run 13 is now in the final stages. This year, RHIC is running with a new lattice, which includes optics for the e-lens. Other changes include modifications to the 9MHz and other RF systems, new bouncer RF cavities and bunch-by-bunch dampers.

The injectors for RHIC continue to run very well. The new ABS source for OPPIS is providing polarized proton beam with expected parameters and the potential to exceed past source performance. In the Booster, the NRO run was successfully completed while setup for polarized protons continued. Setup for the winter NSRL run will begin mid-month. The EBIS source continues to run well and will be utilized to provide all of the ion species for the upcoming NSRL run.

Following the Siemens MG repair, changeover from Westinghouse was quickly completed. The Westinghouse ran well and was quite useful as a back main magnet power supply for the AGS.

At present, RHIC is running well for setup. Collisions have been provided to experiments on a limited basis and start of Physics is expected to be on time, early this month. Once routinely running physics, the challenge of e-lens construction and commissioning will be present throughout the run.

To view a list of the approved work for maintenance days or the shutdown, go the <u>Job Request System</u> and select the appropriate date. This link is behind the firewall and requires privileges to view. For schedule updates see: <u>This Week</u>, which can be viewed by all.

ARRIVALS: Welcome!

Dr. Chiara la Tessa joined the NSRL team as of 28 February 2013. Dr. La Tessa comes to BNL from Helmholtz Centre for Heavy Ion Research (GSI) in Darmstadt, Germany where she one of the managers of experiments for the Biophysics Group. She received her doctorate in physics in 2007 from the Chalmers University of Technology in Gothenburg, Sweden with a thesis on the Fragmentation Cross Sections of Heavy Ions. On 17 July 2012, Chiara La Tessa received the Zeldovich medal for her outstanding contribution to radiation protection in space. She will be working on the mitigation of space radiation effects as part of the NASA effort to reduce the risk of space flight due to cosmic ray radiation.

You can visit Dr. La Tessa in room 247 on the the second floor. She will be working directly under Adam Rusek and will be with us for quite a while so introduce yourself when

you see her in the halls!

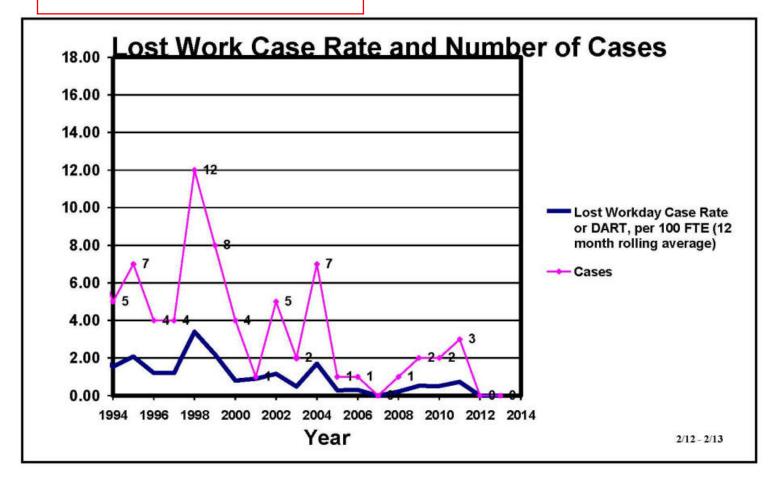
DEPARTURES: Farewell, you will surely be missed..

Matthew Vescovi, Vacuum Systems transferred to Photon Sciences on Feb. 11, 2013

Kenneth Sawicki, Cryogenic Systems (Controls & Instrumentation) - Last day was Feb. 22, 2013

Harold Segura, Access Controls - Last Day March 5, 2013

Safety Stats: Peter Cirnigliaro



	C-AD Occupational Injury Statistics		
	For Year 2012	For Year* 2013	
First Aid Cases	5	0	
Recordable Cases	3	0	
Lost Work Cases	0	0	

March 2013 Issue Contact * Calendar Year through 2/13

DO YOU KNOW ME??

Hi! If you don't know me already, my name is Caitlin Marie Scholl, and I work with Phil Pile as the Experimental Support & Facilities Division Administrative Assistant. I decided I should write about myself to kick off my take over of the Particle Post, but don't worry one of YOU will be chosen each month to tell us a little about yourself. :-)

I went to school at Coastal Carolina University in South Carolina. I loved it there and ended up graduating with my Bachelors in Art.

I started at BNL in January 2010 working in the clerical pool. I met a lot of wonderful people and was able to move around the lab doing different things and working in different Departments and Divisions. I assisted Radiological Protection, Waste Management, Facilities & Operations and NSLS II! I started at C-AD in Oct. 2010 and have loved being here ever since.

I have 1 older brother and 1 younger sister. I live in an apt. in Bethpage and enjoy working out and going to the movies. My favorite food is Mexican food, and margaritas are one of my favorite drinks. I love to cook; I don't bake and I lovvveee going to the beach and going to concerts.

THIS YEAR....

BNL is hosting the Free-Electron Laser Conference in August 2013. I am working as Scientific Secretariat and Editor.

I went to Nara, Japan along with Anna Petway to learn the ins and outs of editing for a scientific conference. I worked with the FEL'12 Editing team and JACoW Team. It was a lot to learn, but I am very grateful for the experience and knowledge I have now gained doing so.

Here are some pictures ..









FEL'12 Auditorium My Mom, Anna and Me at the Reception Anna, Vladimir, Vitaly and Me at the a Committee Dinner & Me feeding the local deer





My Mom, Anna and I at the Virocana Buddha -

This is a picture of all of us

Editors at FEL'12

Height of body: 48.91ft Length of head: 17.75ft Length of Eye: 3.34 ft length of ear: 8.33ft

I then traveled to Valencia, Spain for training at the JACoW Team Meeting. It was a lot to take in and many long hours, but again, I came back with more knowledge and understanding of scientific conferences than I had going in.

As you can see I didn't go sight seeing..







My Hotel Sessions

Part of the JACoW Team in one of our A beautiful old tree I saw in a park across the street I'm in the front!

This past year was exciting and opened my eyes to new cultures, skills and knowledge. I can't wait to see where this year takes me!

experiment can prove me wrong."- Albert Einstein

WINTER STORM NEMO:

Thank you to all emergency personnel for their time and efforts in cleaning up this blizzard's heavy snowfall!

Here are some Peak snow totals by state:

Illinois: Beach Park (7")
Michigan: near Muskegon (15")
New York: Medford (33.5")
Pennsylvania: near Thompson (10.3")
New Jersey: River Vale (16.9")
Virginia: Haywood (5.1")
Connecticut: Hamden (40")
Rhode Island: West Glocester (27.6")
Massachusetts: Framingham (32.2")
Vermont: Marlboro (17.3")
New Hampshire: New Boston (30.4")

Wisconsin: near Kenosha (9")

Maine: Gorham (35.5")





(Pic.1) Northbound on William Floyd Pkwy, Approaching Main Entrance (Pic.2) Bldg. 40D Taken From Brookhaven Ave.





(Pic.1) NSLS II - Taken from the corner of Renaissance Rd. & Brookhaven Ave. (Stop sign is on an 8' Post) (Pic.2) North Parking lot of Bldg. 911 Facing Bldg. 925



Corner of Lewis & Center St. (View of Bldg. 555 in background/sign is 8')





(Pic.1) West Side of Bldg. 460 taken from Brookhaven Ave. (Pic.2) Brookhaven Ave. looking East Bldg. 477 is on Left.





Front of 911 - Picture taken from Bldg. 703 NO ROAD ACCESS!





(Pic.1) South Parking lot of Bldg. 911 (Pic.2) Front of Bldg. 911 - NO ROADWAY!

NOW ... Here are some photos my sister provided me of Wading River.



This is 25A the light is where SWR High school is looking towards William Floyd.



Mist of the Storm - Front Yard



About 5 hours in..



This is Wading River Manor Rd cross st.



This is a picture my sisters boy friend took Sat. afternoon on his way back from Nassau to Wading River.. This is the is 495.



I'm sure most of your cars looked the same way..



This is a walking path after the storm from the front door to the driveway..



Our Driveway like most..